

Wiemhoff, John

From: Schmidt, James W - DNR <JamesW.Schmidt@Wisconsin.gov>
Sent: Tuesday, March 12, 2013 9:25 AM
To: Wiemhoff, John; Sachs, Richard P - DNR
Subject: RE: Attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

We've interpreted that to say there has to be additional documentation and consideration before looking at the alternative river criterion, and this was satisfied by considering the main channel of flow through the lake or reservoir. That's because of the area and size of the water body and the location of the outfall. We've gotten the internal OK to use this value from people involved with developing the rule and guidance. Part of the additional consideration is the TMDL that's in the works, and we're figuring that if the TMDL warrants restricting the loading from this treatment plant, then that should be the overall focus at this site rather than dealing with the criterion on a short-term basis.

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"W for Water"

From: Wiemhoff, John [mailto:wiemhoff.john@epa.gov]
Sent: Tuesday, March 12, 2013 9:08 AM
To: Schmidt, James W - DNR; Sachs, Richard P - DNR
Subject: RE: Attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

James:

Here's where I am confused.

In the "Streams and Rivers" citation below, where they list 0.1 mg/l as the P limit for streams and rivers, they specifically exclude Lake Butt de Morts.

That seems inconsistent with the conclusion of the < 14 assessment conclusion (that it is to be set at 0.1 mg/l).

I don't mean to meddle, but just to understand how this all works.

Thanks James.

John

From: Schmidt, James W - DNR [JamesW.Schmidt@Wisconsin.gov]
Sent: Monday, March 11, 2013 4:45 PM
To: Wiemhoff, John; Sachs, Richard P - DNR

Cc: Kuefler, Patrick; Jann, Steven; Prichard, Gary; Mugan, Tom J - DNR; Lemcke, Michael D - DNR; Azevedo, George

Subject: RE: Attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

No, that language about the 14-day residence time in reservoirs is part of NR 102.06(2)(f), so it does concur with our rule.

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"W for Water"

From: Wiemhoff, John [<mailto:wiemhoff.john@epa.gov>]

Sent: Monday, March 11, 2013 4:32 PM

To: Sachs, Richard P - DNR

Cc: Schmidt, James W - DNR; Kuefler, Patrick; Jann, Steven; Prichard, Gary; Mugan, Tom J - DNR; Lemcke, Michael D - DNR; Azevedo, George

Subject: Attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

Basically is James saying that since the residence time is so small (short time frame, e.g., <14 days), that Lake Butte des Morts is acting more like a flowing river rather than a true reservoir?

And if so, would this override the regulation below, where it had excluded Lake Butte des Morts from the "Streams and Rivers" classification?:

(3) STREAMS AND RIVERS. To protect the fish and aquatic life uses established in s. NR 102.04 (3) on rivers and streams that generally exhibit unidirectional flow, total phosphorus criteria are established as follows:

(a) A total phosphorus criterion of 100 ug/L is established for the following rivers or other unidirectional flowing waters:

1.

....

14. Fox River from outlet of Lake Puckaway near Princeton to Green Bay, excluding Lake Butte des Morts and Lake Winnebago

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From: Sachs, Richard P - DNR [<mailto:Richard.Sachs@wisconsin.gov>]
Sent: Monday, March 11, 2013 4:18 PM
To: Wiemhoff, John
Cc: Kuefler, Patrick; Jann, Steven; Prichard, Gary; Azevedo, George; Schmidt, James W - DNR; Mugan, Tom J - DNR
Subject: FW: CORRECTED WORD document attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

John,

Here's the response from Jim Schmidt, our regional Effluent Limits Calculator, regarding the determination of the applicable phosphorus criterion for Lake Butte des Morts.

Thanks,



Dick Sachs

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From: Schmidt, James W - DNR
Sent: Monday, March 11, 2013 3:55 PM
To: Sachs, Richard P - DNR
Cc: Mugan, Tom J - DNR
Subject: RE: CORRECTED WORD document attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

Here's the wording right out of the WQBEL memo for BDM CSD #1.

At this time, Lake Butte des Morts is believed to be an impounded flowing water rather than a lake or reservoir. Pursuant to s. NR 102.06(4)(c), Wis. Adm. Code, waters impounded on rivers or streams that don't meet the definition of "reservoir" in s. NR 102.06 shall meet the same criteria as the primary stream or river entering the impounded water. The estimated mean water residence time of Lake Butte des Morts is less than 14 days under summer mean flow conditions, which makes the lake an "impounded water" according to the language in s. NR 102.06. According to the Registry of Waterbodies (ROW), the maximum and estimated mean water depths in the lake are 9 and 4.8 feet, respectively, with an estimated 95th percentile of 2.5 to 6.5 feet for the mean depth. With a surface area of 8,567 acres in the lake, the estimated residence time based on the mean flow is 2.2 to 8.8 days based on the end points of the 95th percentile mean depth, both of which are less than 14 days. As such, the criteria used to calculate a water quality-based phosphorus limit at Butte des Morts CSD #1 is 0.1 mg/L, which as noted before are the criteria used for both the Fox river above Lake Butte des Morts and the Wolf River above Lakes Poygan and Winneconne.

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"W for Water"

From: Sachs, Richard P - DNR
Sent: Monday, March 11, 2013 3:47 PM
To: Schmidt, James W - DNR
Cc: Mugan, Tom J - DNR
Subject: FW: CORRECTED WORD document attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

Jim,

In preparation for this morning's conference call with EPA about the Oshkosh permit, they sent out the attached pdf document in which they attempted to summarize applicable P criteria in Lake Winnebago and waters upstream. Therein, the criterion they presumed applicable for Lake Butte des Morts is shown to be 0.04. We had a brief discussion about Lake Butte des Morts and mentioned that the criterion for the Fox River (0.1) is being applied there for the Butte des Morts SD discharge.

John Wiemhoff, from EPA, sent this message with the notes in the Word document in support of why they thought the 0.04 criterion applies at Lake Butte des Morts. Can you provide a summary of how you determined that the river criterion should be applied there instead?

Thanks,
Dick

From: Wiemhoff, John [<mailto:wiemhoff.john@epa.gov>]
Sent: Monday, March 11, 2013 1:46 PM
To: 'richard.sachs@wisconsin.gov'
Cc: Kuefler, Patrick; Jann, Steven; Prichard, Gary; Azevedo, George
Subject: CORRECTED WORD document attachment - FW: Attachment - Lakes upstream of Lake Winnebago - disregard previous email

Didn't have the final correct document (WORD doc)

Here is the right one.

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From: Wiemhoff, John
Sent: Monday, March 11, 2013 1:42 PM
To: 'richard.sachs@wisconsin.gov'
Subject: Attachment - Lakes upstream of Lake Winnebago

Dick:

Thanks for the time to participate on the call Oshkosh conference call today. I think we made progress.

I did want to clarify why I had labeled the 3 lakes upstream from Lake Winnebago as P criteria as 0.040 mg/l on the attached print, so I am attaching the narrative how I came up with that conclusion.

Could you look over the attached and clarify if I have missed something or made any miscalculations?

This just in case this issue comes up on another project later.

Thanks!

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